

# **QUIKPASS**

## **USER**

## **SURVEYS**



TRANSPORTATION LIBRARY  
OCT 15 1989  
UNIVERSITY OF MICHIGAN



Strategic Planning Department  
April, 1989





## QUIKPASS USER SURVEYS NOS. 1 AND 2

This report summarizes the results of two surveys done as part of the CTA Treasury Department's demonstration of rail station access via pass-reading turnstiles. CTA employees had been testing various passes in pass-reading turnstiles since January, 1982; public involvement began in March, 1987 at eight demonstration stations on the rapid transit system.

CTA announced in February, 1987 that eight of 143 rapid transit stations would have electronically-equipped turnstiles which read a magnetically-encoded stripe added to the edge of full-fare monthly passes. QuikPasses were also valid as "flash" passes, wherever other monthly passes can be used. They were made of plastic and sold only at pass sales locations which were near the eight demonstration stations. QuikPass offers operational advantages, as the task of validating the pass for each use is handled electronically by the pass-reader.

Survey No. 1 was given to purchasers of May, 1987, QuikPasses. It asked riders to describe their travel patterns, as well as describing any difficulties they encountered. These difficulties were minor, so that the follow-up survey (No. 2, given in January, 1988) asked fewer questions about difficulties and more about the utility of the QuikPass. Treasury has used the survey data to prepare its final demonstration report.

The immediate future of QuikPass is bright, with up to 20 more stations scheduled to receive pass-reading turnstiles in 1989.

QuikPass is an example of a fare technology intended to increase rider convenience. Survey results indicated that it did. Both surveys reported overwhelming preference for this style of pass and the automated entry procedure, compared to paper "flash" passes and waiting in line. Both groups perceived a reduction in time spent waiting to enter a station because they switched to the QuikPass. This is more important than an objective measurement of traffic flow, which was not part of this survey.

JM/mlh

JME-10  
6/8/89



### Highlights of QuikPass User Survey No. 1

CTA introduced QuikPass, a magnetically encoded, full-fare monthly pass, to the public in March, 1987, for a nine-month demonstration. The passes function as regular monthly passes and, in addition, allow entry through pass-reading turnstiles in eight rapid transit stations. Highlights of the May, 1987 survey of QuikPass purchasers focus on rider reactions and experiences. A follow-up survey is scheduled for October.

Positive reaction to the QuikPass was nearly unanimous, with 98% responding "Yes, I like it". Changes were suggested by only 6%; most of these suggested that pass readers be installed at more stations. Time saved by avoiding lines at the ticket agent booth was reported by 97% of respondents. Including those (such as bus-only user) who perceived no time savings, the mean time saved was 2.9 minutes.

We estimate that as many as 43% of QuikPass pass reader users returned a survey, and that only 15% of the sample of 2,038 are not regular pass reader users. Respondents were all under age 65, with median age in the 25-34 age group and 44% in the age range of 35-64. In addition, of the survey respondents:

- 58% are female
- 64% live in a household with a vehicle available (25% had two or more vehicles available)
- Median household size was two persons (mean = 2.49). 87% were in households of 4 or less
- Median 1986 household income was \$27,400. 12% had income of less than \$10,000; however, 21% had income of over \$40,000.
- Race of those surveyed: 53% White, 35% Black, 6% Asian, and 5% Hispanic.
- 79% used both CTA modes of bus and rail; 12% rail only, 9% bus only.
- 97% usually buy a pass; 20% bought their first QuikPass in May, the third month of the demonstration.

Respondents were surveyed in detail about the frequency and severity of any problems they encountered upon using the QuikPass at a pass reading turnstile. Of the 85% who had used a pass reader:

- 75% have had no trouble using the pass reader
- 15% had minor orientation problems once only; more frequent difficulties were also minor
- Severe difficulties, where the pass-reader-user switched to the agent's line for entry, occurred to less than 3% of pass-reader-users. The most problems occurred at the busiest rail stations, in direct proportion to ridership.
- 82% never needed to give up and switch from pass reader to agent.

Consistent with the trouble-free use and perceived time savings, QuikPass users suggested that more stations get QuikPass readers (23 stations were mentioned by 55 respondents).



## Introduction

QuikPass is available at certain sales locations to full-fare monthly pass purchasers. It functions as a monthly pass, but it is made of plastic rather than card stock, with a magnetic strip which allows unattended entry at eight of about 70 CTA rapid transit station entrances that have coin-operated turnstiles. A demonstration project provides the public with QuikPass cards at the regular price during March through November, 1987.

This is the first of two surveys of purchasers of QuikPasses during the demonstration project. It was designed to determine CTA riders' reaction to this innovation in speedy entry to rapid transit stations, to learn whether any orientation problems remained after two months of use, and to locate any sources of dissatisfaction, especially malfunctioning pass readers.

In May of 1987, 104,257 full-fare monthly passes were sold (for \$46), including 13,646 QuikPasses (out of 15,049 available for sale). Sales agents were instructed to issue a survey (Appendix A) to every person who purchased a May QuikPass; the survey was to be filled out by the person who used the pass, and returned by mail to CTA or directly to the ticket agent at test stations. Survey questions focused on the reactions of the QuikPass users, to the pass and the pass-reader turnstiles; demographic information on the pass user was also sought in the survey. There were 2,038 surveys returned to CTA before May 25, the cutoff date for survey analysis.

## Response to Survey

The response rate was 15% of surveys distributed. It has been estimated from turnstile readings that only 4,000 QuikPass buyers use their passes in the specially-equipped turnstiles each day. But 1,733 of the valid respondents (85%) used at least one of the eight test stations. If there were only 4,000 users the survey included 43% of them, which is likely to be an upper limit of the survey's coverage.

Of those who answered the question "Do you like the QuikPass?", 98% said, "Yes, I do like the QuikPass", of whom only 6% gave a qualified yes. Most of the changes requested were an increased number of test sites. Many of the non-responses added a written comment to the effect that they were not qualified to evaluate the pass reading test sites yet. Only 11% of all respondents either did not offer an opinion (9%) or had an unfavorable response to the QuikPass (2%).

The response rates to sensitive questions were very high: questions on household income and race were answered by 92% and 97% of respondents, respectively. Similar response rates were obtained for the other questions that applied to all respondents.





### Users of QuikPass

The riders surveyed were all QuikPass users who received their surveys either at the point of purchase or (using differently colored replacement surveys) at the QuikPass stations. The sales locations were selected for the survey because they were located near the QuikPass stations, not because of their sales volume or ability to reach a cross-section of all pass purchasers. Still, responses to the demographics questions (number 12A through G) indicate that no single type of person is most likely to buy a QuikPass; QuikPass users had a wide range of incomes, ages, and access to automobiles.

The gender of respondents was 42% male and 58% female. This is consistent with CTA's 1979 survey of all riders, and the 1980 Census of Journey to Work. Women are more likely to use transit than men.

Age of those surveyed was between 18 and 65 for 99.5% of respondents, as expected for purchasers of the full-fare QuikPass (QuikPasses are offered only as full-fare monthly passes for the demonstration). The age of respondents was: 18 to 24 years: 19%; 25 to 34: 35%; 35 to 44: 22%; and 45 to 64: 23%.

We asked the respondents' race to ensure that we reached a representative sample. The results below are similar to Chicago's population by race, with a slightly stronger market share than expected among Asian riders (Table 1).

TABLE 1. RACE OF SURVEY RESPONDENTS

Hispanic origin	5%
Asian	6%
Black	35%
White	53%
American Indian	less than 1%
Other Races	1%

Distribution of respondents' 1986 household income is consistent with number of vehicles available to the household (Table 2). The mean income of

TABLE 2. INCOME, HOUSEHOLD SIZE AND VEHICLE AVAILABILITY

Household Income	%	Household Size	%	Vehicles Available	%
Under \$10,000	12	1	26	0	36
\$10-20,000	24	2	30	1	39
\$20-30,000	25	3	17	2	19
\$30-40,000	18	4	14	3	5
\$40-50,000	11	5	7	4	1
Over \$50,000	10	6	3	5 or more	<1
		7	1		
Median \$25,600		8	1		
Mean \$27,500		8+	<1		



\$27,500<sup>a</sup> was 17% higher than that reported for all riders in the 1979 survey (adjusted for inflation) and the median was 28% higher than measured in 1979. Nearly two-thirds of users have vehicles available (64%), yet still purchase a pass. Of course, we cannot assume that the household auto was available to the pass user, yet CTA's Park'n'Ride lots make such a scenario possible.

QuikPass users classified their pattern of travel on transit (not just at pass reader stations). The classes were travel to or from work or school 5 days a week, or transit usage greater than or less than that level. Three-fourths of respondents indicated they will use transit for more than the twice-daily commute, while 19% would travel only five days a week on their daily trip, and the other 6% would travel less than five days a week.

#### Use of QuikPass

Two questions, 3 and 12B, asked respondents about the types of CTA service used, while questions 10 and 11 examined the frequency of pass purchase and use. This section will also review riders' comments and suggestions about features of the project, including any malfunctions of equipment.

Respondents were asked to check all transit modes used (Table 3). As expected, 91% of respondents were rail users, who had at least a chance to use the QuikPass reading turnstiles. The share of respondents who never used rail (9%) had no experience with the automated equipment. The distribution method for QuikPasses does not restrict sales only to those rail riders using the eight stations in the test. Thus, in addition to the bus-only respondents, 8% of the respondents who used rail had never used a pass-reading turnstile. We expect that the number of QuikPass purchasers who actually use a pass-reading turnstile will increase throughout the demonstration, as these non-participating pass purchasers are replaced with riders who use the stations included in the test and who actively seek the well-publicized QuikPass sales locations.

TABLE 3. TRANSIT USAGE BY SURVEY RESPONDENTS

<u>Modes Regularly Used</u>	<u>Percent of Responses</u>
CTA Bus and Rail	63
Pace and CTA Bus and CTA Rail	15
CTA Rail Only	10
CTA Bus Only	9
Pace and CTA Rail	2
Other combinations	<0.5
Total using CTA Rail	91
Total using bus only	9

<sup>a</sup>Calculated from midpoints of income ranges, with \$7,500 low and \$55,000 high.



The number of respondents who use each of the eight test sites is consistent with overall traffic at each station (Table 4). On average, each respondent used two of the test stations.

TABLE 4. RESPONDENTS USE OF STATIONS IN QUIKPASS DEMONSTRATION PROJECT

QuikPass Station	Respondents Using Station	
	Number of Respondents	%
95th/Dan Ryan	483	14.6
Adams/Wabash	592	17.8
Morse/North-South	219	6.6
Chicago/State	620	18.7
Jefferson Park	242	7.3
Randolph-Washington/Dearborn	531	16.0
Merchandise Mart	327	9.8
Lake/Wells	305	9.2
Total	3319	

In addition, a listing of response rates for each of the 21 locations that sold Mav, 1987, QuikPasses is included in Appendix B.

Questions 4-8, specifically about the pass-reading turnstiles, were skipped by those who did not regularly use them (about 20% of respondents). From the remaining 1650 we learned:

- Pass reader users reported they saved an average of 2.9 minutes each time they could get out of the agent's line to use the pass reader, including respondents whose perceived time savings was zero; for 97% of respondents who saved between one and six minutes, the average time saved was 3.0 minutes.
- 61% of pass reader users used a pass reader five or more times a week, consistent with the responses that overwhelmingly named more than one regularly-used test site.
- 82% of pass reader users never needed to switch to the agent for entry to a test station.
- 75% never had any trouble using a pass reader, and another 15% had trouble only at first. Our field observations showed that as QuikPass users gained experience, they were very likely to assist new users who had difficulties relating to orientation.
- Only 12% reported difficulties with a turnstile (See Appendix C).

The question with the lowest response rate asked respondents to indicate where they had ever had problems with a pass-reading turnstile; 87% of those surveyed did not answer this question. That is consistent with the 82% who said they never had to give up on a pass-reading turnstile and switch to the agent's line. In another question, 75% never had any problems with the pass-reading turnstiles they had used, and another 15% only had problems at first. This 90% figure confirms the other two.



A frequency chart locating pass reader problems is included in Appendix C. Stations with higher traffic through pass readers tended to have more problems, therefore 95th (CTA's busiest rail station) had the most trouble reports (cited by 4% of all QuikPass users), and Morse had the least (1.3%). Exception: Lake/Wells also had other turnstile problems which affected access to the pass reader, which respondents reported as trouble with the pass-reading turnstile.

To learn how durable the pass is, we asked all respondents to turn in any expired QuikPasses for inspection and testing by Facilities Maintenance and Engineering Department staff (now Treasury Department). From the more than 100 expired QuikPasses we received, there was no evidence of wear or damage, despite the most common complaints about the card (by the 24% who had objections to the pass itself) that it was "too thin", followed by "not durable enough" and "the print comes off". The last complaint (print comes off), related both to poor quality ink used to print March passes (a problem corrected in April), and to the smearing of the area intended for the user's signature. Nevertheless, over 75% commented that the quality of the slim, plastic QuikPass card was acceptable, and 94% felt the instructions for use were acceptable, even obvious.

We also noted that very few March or April passes were signed. Of those with signatures, it was obvious that riders had great difficulty getting the ink or pencil marks to adhere to the pass. This situation changed in May, when the area for the user's signature and address was coated with a material less slick than the card.

Users suggested that more stations receive pass reader equipment. Twenty-three stations throughout the system were specifically requested to be equipped with pass-readers, by 55 respondents.

Another suggestion with merit was that CTA punch a hole for a necklace or keychain in the QuikPass. This is done in Hong Kong's rail system, and might be a useful feature for those who need help holding the QuikPass right side up.

#### Conclusions about QuikPass from Survey No. 1

Card-activated access was almost unanimously popular among survey respondents, who tend to be regular riders on CTA's rail system. Difficulties were rare, and orientation was rapid.

Riders perceived no off-peak time savings, but as congestion increases in the agent's line, riders reported savings of over 5 minutes in 16% of the responses. The average, including those who did not save time, was 2.9 minutes saved. Yet riders valued money more than time in listing their reasons for purchasing a pass, and a few respondents indicated that they would not buy QuikPass if it cost more than a regular monthly pass. Pricing issues may be covered more fully in QuikPass User Survey No. 2, to be conducted on purchasers of October, 1987 QuikPasses, and in other surveys of riders.

SJL/mlh

attachments





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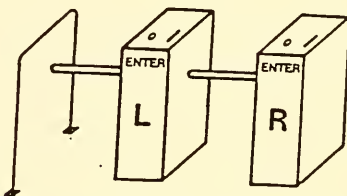
Serial Number was coded to read point of sale  
Date and method of return were also coded

## QuikPass User Survey No. 1

Tell us your experience with the QuikPass! Enter our drawing for a free QuikPass in June 1987.

Just answer the questions below - check all the responses that apply to you - fill in the drawing entry form, and return the survey to us by May 10, 1987. SEE DETAILS BELOW.

8. If you have had trouble regularly in trying to use your QuikPass, which station and which turnstile was involved? (Check all that apply.)



Number indicating response (out of 2,038 returned surveys):

1. Have you used a QuikPass type of Monthly Pass (the plastic card with magnetic strip) before May 1, 1987?
- 433 1 ☐ No, this is my first
- 1495 2 ☐ Yes, I had one in 1 ☐ March, 1987 One marked by 921  
2 ☐ April, 1987 Both marked by 647
2. Do you like the QuikPass?
- 1694 1 ☐ Yes, it is easy to use
- 119 2 ☐ Yes, but I would change a few things
- 12 3 ☐ Not really, more trouble than it is worth
- 26 4 ☐ No, it is not an improvement
- 377 5 ☐ Comments: \_\_\_\_\_

3. At which of these stations do you intend to use your QuikPass at an orange pass reading turnstile? (Check as many as you will regularly use.)

- 131 1 ☐ None - I bought this pass to use on buses only-Skip to Question 9
- 154 2 ☐ None - I don't use any of these eight stations below-Skip to Question 9
- 4833 ☐ 95th
- 5924 ☐ Adams/Wabash
- 2165 ☐ Morse
- 6206 ☐ Chicago/State
- 2427 ☐ Jefferson Park
- 5318 ☐ Washington/Dearborn (Daley Center)
- 3279 ☐ Merchandise Mart
- 3050 ☐ Lake/Wells

4. How often have you used your QuikPass at an orange pass reading turnstile?

- 4851 ☐ More than seven times per week
- 5222 ☐ At least once every weekday
- 4323 ☐ Several times per week, but not every day
- 2014 ☐ Seldom
- 685 ☐ Not at all
- 556 ☐ I haven't yet, but expect to use it \_\_\_\_\_ times per week

5. How much time does your QuikPass save you each time you use the orange pass-reading turnstile?

- 275 1 ☐ more than 5 minutes
- 414 2 ☐ 3 to 5 minutes
- 665 3 ☐ 1 to 3 minutes
- 260 4 ☐ less than 1 minute
- 55 5 ☐ none

6. How often have you had any trouble in using your QuikPass for automatic entry at an orange pass reading turnstile?

- 1234 1 ☐ Never, my pass always works
- 258 2 ☐ Only until I got the feel of it
- 90 3 ☐ About once every two weeks
- 60 4 ☐ At least once a week

7. Have you ever had to go to an agent's lane because none of the orange pass reading turnstiles would accept your pass?

- 1346 1 ☐ Never, my pass always works-Skip to Question 9
- 184 2 ☐ Once
- 72 3 ☐ Twice
- 42 4 ☐ Three or more times

Station	Turnstile
69 1 <input type="checkbox"/> 95th.....	16 L 17 R 36 Both
36 2 <input type="checkbox"/> Adams/Wabash.....	8 L 8 R 20 Both
22 3 <input type="checkbox"/> Morse.....	5 L 1 R 15 Both
42 4 <input type="checkbox"/> Chicago/State.....	10 L 10 R 23 Both
20 5 <input type="checkbox"/> Jefferson Park.....	6 L 4 R 10 Both
29 6 <input type="checkbox"/> Washington/Dearborn.....	7 L 7 R 18 Both
35 7 <input type="checkbox"/> Merchandise Mart.....	10 L 7 R 18 Both
55 8 <input type="checkbox"/> Lake/Wells.....	55 Only one available

8. We need your opinion in the following areas: (check all that apply.)

- A. Pass Card quality. First 3 responses coded
- 1614 1 ☐ O.K. 394 ☐ Printing on pass comes off
- 260 2 ☐ too thin 15 ☐ too messy
- 4 3 ☐ too thick 36 ☐ too stiff
- 1887 ☐ not durable enough
- 97 8 ☐ Other (please print) \_\_\_\_\_

B. Instructions for Use - only first response coded

- 1782 1 ☐ O.K. 304 ☐ not clear
- 27 2 ☐ too extensive 55 ☐ not complete
- 19 3 ☐ too brief 326 ☐ Other (please print) \_\_\_\_\_

10. Do you usually buy a pass?

- 68 1 ☐ No, this is the first time
- 1957 2 ☐ Yes - Why? 1 ☐ saves money, I use CTA often 1620
- 2 ☐ QuikPass saves time 847
- 3 ☐ no need to carry cash for fare 1105
- 4 ☐ Other, please specify 74

11. How often will you use your QuikPass this month?

- 113 1 ☐ Go to and from work or school or other places less than 5 days a week
- 381 2 ☐ Go to and from work or school 5 days a week
- 1512 3 ☐ Go to and from work or school 5 days a week PLUS other trips to shop, entertainment, visit friends, personal business, or work-related

12. Thank you for your help. We would like to know a few things about you. This will help us to understand why people have similar feelings about the QuikPass.

- A. Are you: 1 ☐ Male 832 2 ☐ Female 1152
- B. Do you regularly ride: (check all that apply)
- 1769 1 ☐ CTA buses 361 3 ☐ Pace or Norfair buses
- 1833 2 ☐ CTA trains 15 4 ☐ Other Plus 6 specified

C. Is your age: Metra

- 91 ☐ 12-17 386 2 ☐ 18-24 710 3 ☐ 25-34
- 4514 ☐ 35-44 459 5 ☐ 45-64 3 6 ☐ 65 or over

D. Are you:

- 96 1 ☐ Hispanic 2 ☐ Asian 110 (687 3 ☐ Black
- 1058 4 ☐ White 105 ☐ American Indian 6 ☐ Other 25

E. How many people live in your household? SEE NEXT PAGE

F. How many vehicles (car, van, or other) are available to you and members of your household? SEE NEXT PAGE

G. What was your combined household income last year, 1986?

- 234 1 ☐ under \$10,000 334 ☐ \$30,000-40,000
- 454 2 ☐ \$10,000-20,000 200 5 ☐ \$40,000-50,000
- 468 3 ☐ \$20,000-30,000 194 6 ☐ over \$50,000

## The Details - How To Return Survey

Return the survey plus contest entry blank to the box at the TICKET AGENT BOOTH at one of the eight QuikPass Reader Test Stations - OR - FOLD the survey as indicated so the CTA address shows and DROP IT IN ANY MAIL BOX - CTA pays the postage.

Please return with the survey any expired QuikPass you have, in any condition, to show us how we're doing! THANK YOU FOR YOUR HELP!



Appendix A

Question 12. E.

Number of people in household	Number Responding
1	491
2	563
3	321
4	261
5	131
6	63
7	27
8	17
More than 8	11

Question 12. F.

Vehicles Available	Number Responding
None	685
1	731
2	354
3	93
4	22
5	10
8	1
9	1

3A

1.51

8/31/87



Appendix B: Response Rate by QuikPass sales location

<u>Location</u>	<u>Frequency</u>	<u>QuikPass Sales</u>	<u>Rate Response</u>
Encyclopedia Britannica	47	149	31.5%
Randolph/LaSalle Curr. Exch.	181	600	30.2%
CTA Cashier - Mart	236	802	29.4%
DePaul University - Loop	96	353	27.2%
95th Terminal	238	1,064	22.4%
Northwestern Memorial Hospital	79	359	22.0%
NBC (in Mart)	27	153	17.6%
300 South Michigan	97	633	15.3%
32 W. Washington C. E.	242	1,587	15.2%
Pleasure Travel near Ad./Wab.	71	479	14.8%
Randolph/State C. E.	91	800	11.4%
Chicago/Rush Curr. Exch.	219	2,200	10.0%
Jefferson Park - Peerless Svgs.	15	160	9.4%
Morse Station C. E.	50	584	8.6%
New Rush C. E.	33	395	8.3%
New Clark/Morse C. E.	27	336	8.0%
2nd Floor Mart C.E.	35	752	4.7%
Jefferson Park-Hoyne Svgs.	12	266	4.5%
Wabash/Adams C. E.	7	750	0.9%
North State C. E.	1	213	0.5%
111th/Michigan Currency Exchange	0	653	0.0%
Replacement (White) Surveys Given out at pass readers	234	-----	Not applicable
 TOTAL	 2,038	 13,288	 15.3%

3A

1.51

8/31/87



Appendix C: Test Sites, Traffic, and Trouble (Survey Questions 2 and 8)

<u>Station With Pass Readers</u>	<u>Trouble Identified at These Pass Readers</u>		<u>Weekday, April 1987 Pass Reader Traffic</u>	
	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
95th/Dan Ryan	69	22.4%	973	29.3%
Lake/Wells	55	17.9%*	117	3.5%
Chicago/North-South	42	13.6%	684	20.6%
Adams/Wabash	36	11.7%	311	9.4%
Merchandise Mart	35	11.4%	375	11.3%
Randolph-Washington/Dearborn	29	9.4%	241	7.3%
Morse/North-South	22	7.1%	298	8.9%
Jefferson Park/West-Northwest	20	6.5%	323	9.7%
	—	—	—	—
TOTAL	308	100.0%	3,322	100.0%

Out of 2,038 people surveyed, only 254 identified a pass reader location which gave them trouble.

87.5% of those surveyed did not report trouble, including 75% of regular pass reader users.

\*Only Lake/Wells station has a trouble level which is inconsistent with its traffic level. This is because the single pass reader installed here has no back-up unit--it was installed years before the QuikPass introduction for testing by CTA employees and remains in place as a convenient test location. CTA specifications require at least two pass readers at a typical installation. In addition, some of those surveyed commented that iron gates installed near the pass reader occasionally blocked access to the turnstile. These iron gates are supposed to be open at all times.

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#### Appendix D: Survey Incentives

QuikPass users received a survey upon purchasing a QuikPass at any of the 21 locations which sold QuikPasses for May 1987. These locations sold only QuikPasses to full-fare monthly pass purchasers, until supplies ran out. Because the quantity of QuikPasses was limited to the 15,000 being tested, and not all purchasers would be likely to use the pass reading turnstiles, several methods were employed to increase awareness of the QuikPass Survey and encourage a high return rate.

Posters in the 21 sales locations and eight test stations described the features of the QuikPass demonstration project to users and non-users alike. These posters were updated in subsequent months to inform users of new sales locations and the current month's first date of sale.

A reward, mentioned on the posters, was offered to those who returned a completed survey on time and who completed an entry blank at the bottom of the survey form. The entry blanks were cut off the survey by CTA machinery and put into a drawing which awarded ten free monthly passes for July, 1987. Separation of the entry blank preserved the confidentiality of the survey's demographic data.

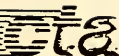


APPENDIX E: NOTES ON SURVEY ADMINISTRATION

1. Not all pass sellers distributed the surveys. Is there any way to encourage their participation? This was a generally satisfactory method.
2. Only 10% of surveys were returned via the ticket agents. More visible signage will have to be used if that collection method is used for the second survey.
3. Demographic questions were very successful. They have been repeated in six other CTA surveys, and can be compared with those surveys as they are completed.

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Date: June 2, 1987

To: C. Gaca, Unit Supervisor, Fare Collection Development  
D. Mangelsdorff, Transit Technician  
From: S. J. LaBelle, Superintendent, Market Analysis/Research  
Re: QuikPass Survey No. 1

Attached is the summary of comments on QuikPass Survey No. 1 that Dale requested at the last coaches' meeting. These are comments that were written in by survey respondents, related to a specific question or in general. The first comment--great idea, etc.--was written in by a majority of commenters who checked that yes, the QuikPass is easy to use. Of those answering that question (#2 on the attached survey form), over 90% checked box number 1, yes it is easy to use; that is rousing support from riders for your project!

Also attached are photocopies of comments you and Terry Hocin in Promotional Services might find interesting. These comments are all the ways that riders said they liked the QuikPass, i.e., many variations Great idea! Best thing since sliced bread!

We are now entering in the data from the last 80 surveys, received after the close of the drawing, bringing the total of usable surveys over 2000. The exact final count will be included with our report on the survey tabulations, coming out later this week.

At least according to riders, you two have had an excellent idea, well executed! Let's keep the ball rolling (or the turnstile turning?).

SJL/mlh

attachments

cc: T. A. Hocin  
D. G. Stuart  
J. Mulqueeny

d-15  
1.32



COMMENTS FROM RIDERS ON QUIKPASS SURVEY NO. 1

<u>Comments</u>	<u># Of Respondents</u>	<u>Related to Question #</u>
-Great idea, what took you so long	Most Respondents	General
-Concern about security (no agents)	1	
-Need to take out of protecting holder	4	
-Better than exact Fare at Morse	2	9A
-Easy to budget	1	10-2-4
-Concern about job loss (e.g. of agents	2	2
<u>Install in this station:</u>		9A
-State/Lake	2	
-Belmont/N-S	3	
-Howard Street	10	
-Western/Ravenswood	3	
-U of I	2	
-Monroe/D	2	
-Loyola	1	
-Davis	1	
-87th/Ryan	2	
-Desplaines/C	1	
-Fullerton	2	
-Clark/Div	1	
-River Rd	2	
-O'Hare	4	
-Harlem/O'Hare	3	
- "South Side"	1	
-Wash/State	4	
-Jackson	6	
-Roosevelt	1	
-63/Ashland	1	
-Madison/Wabash	1	
-Polk	1	
-Clinton/Lake	1	
-Hassled by ticket agent May, March, bus March	1	
-Too much info on how QuikPass works	1	9B
-Transfer don't give enough time	7	10-2
-Hard to write on pass (signature, M/F)	13	9A
-March Pass Printing Came Off	2	9A





Comments from Riders on QuikPass Survey No. 1

<u>Comments</u>	<u># Of Respondents</u>	<u>Related to Question #</u>
-Saved time & avoided being victim of crime	1	2
-Better than the paper passes	4	9A
-More wear at end of month	1	9A
-Make turnstile beep when pass is accepted	1	9A
-Make it for left handed people	1	9A
-When damp will not work	1	2-9A
-Turnstiles should be one-way	10	2
o Wash/Dearborn	4	
o Jeff	3	
o 95th	3	
-Instructions should be more visible in stations	1	9B
-Code both sides	1	2
-Fear fare increase	1	2
-More sales locations	3	General
-Put CTA on front	1	
-Make it bigger	1	9A
-Put hole in pass to put it on keychain	1	9A

SJL/JM:mlh

d-15

1.30

5/28/87









Date: April 21, 1989

To: QuikPass Project Team  
From: Sarah J. LaBelle, *SJL* Superintendent, Market Analysis and Research  
Re: QuikPass User Survey No. 2

The results of the above survey, taken in January of 1988, are attached.

It is a follow-up to a May, 1987 survey, summarized in a September 1987 report. Customer approval remains nearly unanimous among pass users, forecasting a good future for expanded QuikPass use in pass-reading turnstiles.

JM/n1

Attachment

Project Team:

C. F. Arndt  
T. Hocin  
T. Canning  
C. Gaca  
D. Mangelsdorff

M. Daley  
M. K. Christopher  
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cc: D. G. Stuart  
E. R. Sawyer

SP069A



## HIGHLIGHTS OF QUIKPASS USER SURVEY NO. 2

CTA introduced QuikPass, a magnetically encoded, full-fare monthly pass, to the public in March, 1987, for a nine-month federally-funded demonstration that CTA extended, then incorporated as one of the fare payment options CTA will continue to offer. The passes function as regular monthly "flash" passes and, in addition, allow entry through pass-reading turnstiles in eight rapid transit stations.

Use of pass-reading turnstiles tapered off slightly between QuikPass Survey No. 1 (when daily usage peaked at 3,422), and Survey No. 2 (when fare changes drove away some of the 3,297 daily riders counted in November, 1987). The usage decrease was due in part to the high percentage of new users (20%) not yet oriented to the turnstiles, considering that sales of QuikPasses rose from 13,646 to 14,296 (5%), because riders who boarded at pass-reader stations discovered where (including new locations) to buy QuikPasses. Purchasers of January, 1988 QuikPasses reported that 28% of them also bought QuikPasses in May, the first survey month. This increased sharply in September to 53% and reached 63% in November. A slight increase in the volume of QuikPasses available for sale, and the addition of a few more sales locations helped us continue to offer QuikPasses to new users, despite an increase (from \$46 to \$50) in the price of all 1988 passes.

There were fewer QuikPass users than in the first survey month, and we received a lower percentage of surveys (10% vs. 15%) from the later group. Two factors kept us from improving our response rate in the second survey: first, surveys were returned entirely by mail, and we did not have collection boxes out as a reminder to return QuikPass No. 2 surveys; second, some sales locations refused to distribute Survey No. 2. Comments alerted us to two areas of misinformation which should be addressed: The phrase "QuikPass" is absent (many CTA employees call it the "Slide-Thru"), and instruction cards are no longer available.

Positive reaction to the QuikPass remained nearly unanimous, with 97% responding "Yes, I like it." Changes were suggested by 49%, but focused on the benefits of the QuikPass: 95% of the changes asked that more stations receive QuikPass readers. These tended to be the same high-volume stations mentioned in the first survey, already scheduled for installation in 1989. Reported time savings at QuikPass stations increased; 97% avoided delays in line. Including those (such as bus-only users) who perceived no time savings, the mean time saved rose from 2.9 to 3.2 minutes.

We estimate that as many as 36% of QuikPass pass-reader users returned a survey, and that only 18% of the sample of 1,466 are not regular pass-reader users. Respondents were all under age 65, with median age in the 25-34 age group and 45% in the age rate of 35-64. In addition, of the survey respondents:

- ◇ 20% were new users
- ◇ 55% were female, but users of each QuikPass station (except 95th) tended to be male
- ◇ 66% lived in a household with a vehicle available (26% had two or more vehicles available)





- ◇ Median household size was two persons (mean = 2.50). 89% were in households of 4 or less.
- ◇ Median 1986 household income was \$25,600. 11% had income of less than \$10,000; however, 22% had income of over \$40,000.
- ◇ Race of those surveyed: 60% White, 27% Black, 6% Asian, and 6% Hispanic.
- ◇ 74% used both CTA modes of bus and rail; 14% rail only, 11% bus only.
- ◇ 58% never had a pass-reader problem that required them to switch to an agent, while 11% reported a problem three or more times, mostly at Lake/Wells, where a locked gate was the problem.

Respondents were asked about defects in the QuikPass construction during the first survey. These were remedied, so the question was revised in the second survey to a simple preference of the regular paper pass versus the QuikPass (which is thinner and made of flexible plastic). QuikPass was preferred by 97%; the remainder were infrequent or non-users of the eight QuikPass stations. Even of those who do not like the QuikPass, 54% preferred it to the paper pass.

#### Recommendations

A promotional effort should be able to demonstrate how QuikPass reduces our expenses at relatively low development cost, and is perceived as an improvement by nearly all who included comments.

Product identification is completely absent from the passes and the turnstiles; we must show the QuikPass name.



## JANUARY 1988 QUIKPASS USER SURVEY NO. 2

### Introduction

QuikPass is available at certain sales locations to full-fare monthly pass purchasers. It functions as a monthly pass, but it is made of plastic rather than card stock, with a magnetic strip which allows unattended entry at eight out of 72 CTA rapid transit station entrances that have coin-operated turnstiles. There is no additional charge for the QuikPass type of monthly pass.

This was the second of two surveys of purchasers of QuikPasses during the end of a nine-month demonstration. The program has been extended indefinitely in response to favorable rider response and its potential for fulfilling fare policy objectives. The survey was designed to verify that rider acceptance of QuikPasses continued to improve after its introduction, that malfunctions had not become a problem, and that time savings were the same or better as most users became oriented to the pass readers.

In January of 1988, 91,953 full-fare monthly passes were sold (for a one-time price of \$49.50 as a transition between 46 and 50 dollars), including 14,296 QuikPasses (out of 18,100 available for sale). Sales agents were instructed to issue a survey (Appendix A) to every person who purchased a January QuikPass; the survey was to be filled out by the person who used the pass, and returned by mail to CTA. Survey questions focused on the reactions of the QuikPass users to the pass; demographic information on the pass user was also sought in the survey. There were 1,466 surveys returned to CTA before January 26, the cutoff date for survey analysis.

### Response to Survey

The response rate was 10% of surveys distributed. We estimated from turnstile readings that only 3,300 QuikPass buyers used their passes in the specially-equipped turnstiles each day. But 1,201 of the valid respondents (82%) used at least one of the eight test stations. If there were only 3,300 users the survey included 36% of them, which is likely to be an upper limit of the survey's coverage.

Of those who answered the question "Do you like the QuikPass?", 97% said yes in one of three forms. 47% gave an unqualified yes, only 2% gave a qualified yes, and 47% more said "Yes, but add more stations." Only 3% of all respondents either did not offer an opinion (1%) or had an unfavorable response to the QuikPass (2%, same as on the previous survey).

The response rates to sensitive questions were very high: questions on household income and race were answered by 93% and 97% of respondents, respectively. Similar response rates were obtained for the other questions that applied to all respondents.



## Users of QuikPass

The riders surveyed were all QuikPass users at all QuikPass sales locations. Users received their surveys at the point of purchase and mailed them to CTA. The sales locations were selected to sell QuikPasses for the demonstration because they were located near the QuikPass stations, not because of their sales volume or ability to reach a cross-section of all pass purchasers. When the supply of QuikPasses was increased by CTA, sales locations in minority areas were given QuikPasses, while other sales locations that already sold QuikPasses also received larger supplies. However, the new sales locations on the Far South Side and at Howard were unable or unwilling to distribute surveys to pass purchasers there. Still, responses to the demographic questions (number 11A through G) indicated that no single type of person was most likely to buy a QuikPass; QuikPass users continued to have a wide range of incomes, ages, and access to automobiles. Results were very similar (within 1% to all responses, except race) to those of the first survey. An appendix (D) of demographics for each station's users includes some users at more than one station, yet few differences (other than those of 95th station) are apparent.

The gender of the respondents was 45% male and 55% female. This is consistent with the first QuikPass User Survey, CTA's 1979 survey of all riders, and the 1980 Census of Journey to Work. Women are more likely to use transit than men. However, users of QuikPass stations (except 95th) tended to be male, as reported in Appendix D, Table 10.

Age of those surveyed was between 18 and 65 for 99% of respondents, as expected for purchasers of the full-fare QuikPass (QuikPasses are currently offered only as full-fare monthly passes). The age of respondents was: 18 to 24 years - 17%; 25 to 34 - 36%; 35 to 44 - 24%, and 45 to 64 - 22%.

We asked the respondents' race to ensure that we reached a representative sample. The results below were similar to Chicago's population by race, with a slightly lower market share than expected among Black riders (Table 1), resulting from the low response rate on surveys distributed at 95th Terminal and the non-participation of currency exchanges on the Far South Side and at Howard.

Table 1. Race of Survey Respondents

Hispanic origin	6%
Asian	6%
Black	27%
White	60%
American Indian	less than 1%
Other Races	1%

Distribution of respondents' 1986 household income (Table 2) was consistent with number of vehicles available to the household. The mean income of \$28,000<sup>a</sup> was 19% higher than that reported for all riders in the 1979 survey (adjusted for inflation) and the median was 28% higher than that measured in 1979. Of all

<sup>a</sup> Calculated from midpoints of income ranges, with \$7,500 low and \$55,000 high.



QuikPass station users, those using 95th were more likely to report low incomes. Nearly two-thirds of users had vehicles available (Table 3).

Table 2. QuikPass Users -- Income and Household Size

<u>Household Income</u>	<u>%</u>	<u>Household Size</u>	<u>%</u>
Under \$10,000	11	1	29
\$10,000-20,000	24	2	33
\$20,000-30,000	27	3	16
\$30,000-40,000	16	4	12
\$40,000-50,000	9	5	6
Over \$50,000	13	6	2
		7	1
Median \$25,600		8	less than 1
Mean \$28,000			

Table 3. QuikPass Users - Vehicle Availability

<u>Vehicles Available</u>	<u>%</u>
0	34
1	40
2	18
3	6
4	1
5 or more	1

QuikPass users classified their pattern of travel on transit (not just at pass reader stations). The classes were travel to or from work or school 5 days a week, or transit usage greater than or less than that level. Nearly three-fourths of respondents indicated they used transit for more than the twice-daily commute, while 21% traveled only five days a week on their daily trips, and the other 5% traveled less than five days a week.

#### Use of QuikPass

Once again, riders were asked about the types of CTA service used (questions 3 and 12B), but most questions about difficulties with pass-reading turnstiles were dropped for the second QuikPass survey, in favor of questions on the material of the pass and the opportunity to make extra trips. One question about extreme malfunction of pass-reading turnstiles was retained to verify that malfunctions have not grown out of proportion to the time units have been in service.

Respondents were asked to check all transit modes used (Table 4). As expected, 87% of respondents were rail users, who had at least a chance to use the QuikPass reading turnstiles. Because the second survey was done after some users had used the QuikPass for ten months, the number of QuikPass users who had





actually used a pass-reading turnstile had increased so that nearly all respondents felt qualified to evaluate the QuikPass. Some commented, however, that they learned from other users or ticket agents how QuikPasses work, because printed instructions were no longer available.

Table 4. Transit Usage by QuikPass Respondents

<u>Modes Regularly Used</u>	<u>Percent of Responses</u>
CTA Bus and Rail	63
Pace and CTA Bus and CTA Rail	11
CTA Rail only	13
CTA Bus only	11
Pace and CTA Rail	2
Other combinations	<1
Total using CTA Rail	89
Total using Bus only	11

The number of respondents who use each of the eight test sites was consistent with overall traffic at each station, except for 95th, where nearby sales locations had low response rates. This was remedied somewhat by the strong response rates from downtown sales locations which served riders using 95th with more convenient hours of pass sales. On average, each respondent used two of the test stations (Table 5). Stations were presented on the second survey in reverse order from before, to ensure that position on the list did not bias the results.

Table 5. Respondents' Use of Stations in QuikPass Demonstration Project

<u>QuikPass Station</u>	<u>Respondents Using Station</u>	
	<u>Number of Respondents</u>	<u>%</u>
95th/Dan Ryan	207	9.0
Adams/Wabash	315	13.6
Morse/North-South	161	7.0
Chicago/State	595	25.7
Jefferson Park	179	7.7
Randolph-Washington/Dearborn	402	17.4
Merchandise Mart	259	11.2
Lake/Wells	194	8.4
Total <sup>b</sup>	2,312	

In addition, a listing of response rates for each of the 29 locations that sold January 1988 QuikPasses is included in Appendix B. This is followed by a listing of other QuikPass stations used by the QuikPass users of each station, in Appendix C. Selected other questions are reported by station in Appendix D.

<sup>b</sup> Some riders used more than one station.



### Time Saved by QuikPass Users

We found a significant increase (at the 95% confidence level) in the average time saved by QuikPass users, compared with the first survey. This was even more remarkable, considering that very few other survey responses differed between the two survey groups. Two factors were plausible contributors to the increased reporting of time savings (which equals a reduction in travel time):

- QuikPass users have become better oriented to using the pass-reading turnstiles through experience and learned to improve their speed through them;
- Out-of-vehicle time estimates by riders are subjective, and a reduction means that users value the time savings (whatever it actually is) more highly than they did when the QuikPasses were new and untested by many users.

Pass-reader users reported they saved an average of 3.2 minutes each time they could use the pass-reader instead of waiting in the agent's line. This average includes respondents whose perceived time savings was zero; for 97% of all respondents who saved between one and six minutes, the average time saved was 3.3 minutes.

Also in keeping with increased experience in using pass-reading turnstiles, more respondents reported difficulty at some point since the pass-readers were installed. Higher-traffic station users were most likely to experience difficulty. This is especially true at 95th, CTA's busiest rail station. The nature of some of these problems may be that entry is possible only at the agent's window when many riders are exiting through the QuikPass turnstiles with few other exits possible. Similarly, Lake/Wells was still the only station to report an unusual number of difficulties. This is likely to be because there is no second (or "backup") pass-reading turnstile at this location only, and that access to this turnstile is often blocked by an iron gate. Despite these issues and the simple fact that the number of QuikPass users who ever experienced a pass-reader problem will increase over time, 57% of respondents said they never had to give up and go to the agent. It happened once to 20%, twice to 12%, and three or more times to 11%.

### Induced Trips

A new question asked riders how many extra trips they expected to make this month because they use a QuikPass. No difference was reported by 21%, 1 to 4 extra trips by 25%, 5 to 8 extra trips by 21%, 9 to 12 extra by 15%, 13 to 16 by 5%, and over 16 extra trips by 13%. This is consistent with the 75% who said they would make more than the usual five weekly round trips.

### Pass Material Preference and Other Comments

We gave this survey group a new question to verify that the slim, plastic material used for QuikPasses is preferred to the regular paper pass. QuikPasses were preferred by 97% of respondents, with the bus-only users as the only subgroup who did not have an equally strong preference (only 85% preferred



plastic). Even in the group of riders who did not like the QuikPass (Question 2), 54% still preferred the plastic pass. No characteristic was seen to unify either the paper pass preferrers or the QuikPass dislikers.

We invited riders to send us their unused QuikPasses for inspection. All arrived in excellent condition and were sent to Treasury Department staff. But we noted that it was still difficult to sign the back of the pass, so very few signed passes were received.

Comments focused on adding pass-readers at most heavily used stations. There were comments by rail riders criticizing the January 1988 increase in pass prices because of the increase in the bus fare to \$1.00 while the \$1.00 fare on rail remained unchanged. Many remarked that tokens had now become more attractive than passes, and if it were not for QuikPasses they would have shifted to tokens or cash or non-CTA transportation altogether.

### Conclusions about QuikPass from Survey No. 2

Card-activated access continues to improve passenger movements in rapid transit stations, now that the rapid orientation phase has passed.

Riders reported savings of over 5 minutes in 21% of the responses. Also, 13% believed that having a pass caused them to make more than 16 additional monthly trips. Yet riders valued money more than time (39% to 31%) in listing their reasons for purchasing a pass, and about 50 respondents indicated that they would not buy QuikPass if it required service to be curtailed elsewhere, or if it cost more than a regular monthly pass. Rider groups in both surveys were extremely similar, with nearly identical (within 1%) response patterns to all questions except race.

JM/nl

Attachments: Appendices A-D

SP069



# APPENDIX A: SURVEY FORM AND FREQUENCY OF RESPONSES

Serial number was coded to read point of sale and date of return.

## QuikPass User Survey No. 2

Tell us your experience with the QuikPass! Enter our drawing for a free QuikPass for March 1988. See Appendix E.

Just answer the questions below - check all the responses that apply to you - fill in the drawing entry form, and return the survey to us by the 10th of the month. SEE DETAILS BELOW.

Number, indicating each response (out of 1,466 returned surveys):

1. Have you used a QuikPass type of Monthly Pass (the plastic card with magnetic strip) before December 1, 1987?  
 293 1 ☐ No, this is my first  
 1,164 2 ☐ Yes, I had one in 1 ☐ March 353 July 544 Nov. 1987 921  
 2 ☐ April 358 Aug. 642  
 3 ☐ May 407 Sept. 771  
 4 ☐ June 464 Oct. 856  
 December, 1987 was written in by 134

2. Do you like the QuikPass?

- 666 1 ☐ Yes, it is easy to use  
 35 2 ☐ Yes, but I would change a few things  
 663 3 ☐ Yes, but I would add more stations  
 20 4 ☐ Not really, more trouble than it is worth  
 26 5 ☐ No, it is not an improvement

3. At which of these stations do you intend to use your QuikPass at an orange pass reading turnstile? (Check as many as you will regularly use.)

- 134 0 ☐ None - I bought this pass to use on buses only-Skip to Question 7 Responses to 4-6 excluded below  
 131 1 ☐ None - I don't use any of these eight stations below-Skip to Question 7 Responses to 4-6 excluded below  
 194 2 ☐ Lake/Wells  
 259 3 ☐ Merchandise Mart  
 402 4 ☐ Washington/Dearborn (Daley Center)  
 179 5 ☐ Jefferson Park  
 595 6 ☐ Chicago/State  
 161 7 ☐ Morse  
 315 8 ☐ Adams/Wabash  
 207 9 ☐ 95th

4. How often have you used your QuikPass at an orange pass reading turnstile?

- 308 1 ☐ More than seven times per week  
 333 2 ☐ At least once every weekday  
 322 3 ☐ Several times per week, but not every day  
 158 4 ☐ Seldom  
 31 5 ☐ Not at all  
 19 6 ☐ I haven't yet, but expect to use it \_\_\_\_\_ times per week

5. How much time does your QuikPass save you each time you use the orange pass-reading turnstile?

- 233 1 ☐ more than 5 minutes  
 315 2 ☐ 3 to 5 minutes  
 444 3 ☐ 1 to 3 minutes  
 139 4 ☐ less than 1 minute  
 35 5 ☐ none

6. Have you ever had to go to an agent's lane because none of the orange pass reading turnstiles would accept your pass?

- 641 1 ☐ Never, my pass always works  
 219 2 ☐ Once  
 132 3 ☐ Twice  
 123 4 ☐ Three or more times

7. Why did you buy a pass this month? (Check the most important reason)

- 448 1 ☐ QuikPass saves time  
 409 2 ☐ no need to carry cash for fare  
 563 3 ☐ saves money, I use CTA often  
 40 4 ☐ Other, please specify \_\_\_\_\_

8. IF orange QuikPass reading turnstiles were installed at every rail station YOU use, which type of pass would you prefer?

- 1,363 1 ☐ QuikPass 48 2 ☐ Regular Paper Pass

9. Some CTA pass users make extra trips on CTA that they would not take if they had to pay cash. How many extra one-way trips will you make this month because you bought a QuikPass?

- 309 1 ☐ No extra trips 214 4 ☐ 9 to 12 extra trips  
 353 2 ☐ 1 to 4 extra trips 75 5 ☐ 13 to 16 extra trips  
 298 3 ☐ 5 to 8 extra trips 186 6 ☐ 17 or more extra trips this month

10. How often will you use your QuikPass this month?

- 71 1 ☐ Go to and from work or school or other places less than 5 days a week  
 306 2 ☐ Go to and from work or school 5 days a week  
 1,062 3 ☐ Go to and from work or school 5 days a week PLUS other trips to shop, entertainment, visit friends, personal business, or work-related

11. Thank you for your help. We would like to know a few things about you. This will help us to ensure that our survey represents all groups of riders.

A. Are you: 652 1 ☐ Male 782 2 ☐ Female

B. Do you regularly ride: (check all that apply)

- 1,227 1 ☐ CTA buses 195 3 ☐ Pace or Norrtan buses  
 1,281 2 ☐ CTA trains 9 4 ☐ Other \_\_\_\_\_  
 Plus 7 specified Metra

C. Is your age:

- 7 1 ☐ 12-17 245 2 ☐ 18-24 525 3 ☐ 25-34  
 339 4 ☐ 35-44 318 5 ☐ 45-64 10 6 ☐ 65 or over

D. Are you:

- 78 1 ☐ Hispanic 81 Asian 376 Black  
 859 4 ☐ White 7 American Indian 20 Other \_\_\_\_\_

E. How many people live in your household? See next page

F. How many vehicles (car, van, or other) are available to you and members of your household? See next page

G. What was your combined household income last year, 1986?

- 155 1 ☐ under \$10,000 223 4 ☐ \$30,000-40,000  
 322 2 ☐ \$10,000-20,000 121 5 ☐ \$40,000-50,000  
 363 3 ☐ \$20,000-30,000 178 6 ☐ over \$50,000

1-5 above  
 Please tell us any comments you have about QuikPass or QuikPass reading turnstiles.

70% were received the first week in January; the rest before

The Details - How To Return Survey February passes were sold.

Return the survey plus contest entry blank to the survey box at one of the eight QuikPass Reader Test Stations - OR - FOLD the survey as indicated so the CTA address shows and DROP IT IN ANY MAIL BOX - CTA pays the postage.

Please return with the survey any expired QuikPass you have, in any condition, to show us how we're doing! THANK YOU FOR YOUR HELP!





# APPENDIX A

## Question 12. E.

Number of people in household

Number Responding

1	412
2	457
3	223
4	163
5	87
6	31
7	18
8	7
More than 8	7

## Question 12. F.

Vehicles Available

Number Responding

None	430
1	507
2	221
3	80
4	15
5	5
6	2
7	3
9	2



Appendix B: Response Rate by QuikPass Sales Location

Location	Surveys Returned	Jan. 1988 QuikPasses Sold	Response Rate
Pleasure Travel near Adams/Wabash	73	308	23.7%
Northwestern Memorial Hospital	78	339	23.0%
CTA Cashier - Mart	169	759	22.3%
NBC (in Mart)	29	131	22.1%
Grand/State Currency Exchange*	69	337	20.5%
Randolph/Clark C.E.*	104	521	20.0%
SUIC Currency Exchange*	47	237	19.8%
DePaul University - Loop	19	104	18.3%
Ohio/Fairbanks C.E.*	28	160	17.5%
Encyclopedia Britannica	26	150	17.3%
300 South Michigan	75	475	15.8%
Jefferson Park - Hoyne Savings	34	218	15.6%
Chicago/Rush C.E.	325	2,140	15.2%
Morse Station C.E.	62	559	11.1%
Randolph/State C.E.	78	764	10.2%
New Rush C.E.	32	327	9.8%
13 W. Washington C.E.	126	1,412	8.9%
New Clark/Morse C.E.	18	298	6.0%
Jefferson Park - Peerless Savings	7	143	4.9%
2nd Floor Mart C.E.	27	661	4.1%
Washington/Wabash C.E.*	2	72	2.8%
Randolph/LaSalle C.E.	10	407	2.5%
Wabash/Adams C.E.	15	703	2.1%
North State C.E.	3	180	1.7%
95th Terminal	10	1,109	0.9%
Howard/Paulina C.E.*	0	849	0.0%
111th/Michigan C.E.	0	683	0.0%
110th/Halsted C.E.*	0	136	0.0%
103rd/Michigan C.E.*	0	114	0.0%
Total	1,466	14,296	10.3%

\* 1 of 8 new sales locations for QuikPasses. Beginning in December, 1987, the number of QuikPasses offered for sale was increased from 15,000 to 18,000.

Price of the QuikPass over time was kept same as regular monthly pass price:

\$46.00 for March through December, 1987

\$49.50 for January, 1988

\$50.00 for February 1988 and subsequent months.



### Appendix C: Multiple QuikPass Station Usage

Table 5 of the report listed how many respondents used each of the eight stations which had pass-reading turnstiles. This Appendix further examines how many users of a given QuikPass station also use another QuikPass station. The demand measured here, in terms of relative usage of station pairs, is intended as a guide for adding unnamed future QuikPass stations, so that a network of well-chosen pairs will increase demand for QuikPasses more quickly. It will be noted that some groups below are not origin-destination pairs, but rather alternative destinations. In this situation we increase convenience for users without maximizing the number of users we can cover.

#### Station 1: Chicago/State

<u>Respondents Using Station = 595</u>		
<u>Other Station</u>	<u>Number of Respondents</u>	<u>%</u>
Randolph-Washington/Dearborn	200	33.6
Adams/Wabash	149	25.0
Merchandise Mart	123	20.7
Morse/North-South	97	16.3
Lake/Wells	91	15.3
95th/Dan Ryan	87	14.6
Jefferson Park	66	11.1

#### Station 2: Randolph-Washington/Dearborn

<u>Respondents Using Station = 402</u>		
<u>Other Station</u>	<u>Number of Respondents</u>	<u>%</u>
Chicago/State	200	49.8
Adams/Wabash	117	29.1
Jefferson Park	107	26.6
Lake/Wells	107	26.6
Merchandise Mart	97	24.1
95th/Dan Ryan	58	14.4
Morse/North-South	55	13.7

#### Station 3: Adams/Wabash

<u>Respondents Using Station = 315</u>		
<u>Other Station</u>	<u>Number of Respondents</u>	<u>%</u>
Chicago/State	149	47.3
Randolph-Washington/Dearborn	117	37.1
95th/Dan Ryan	103	32.7
Merchandise Mart	95	30.2
Lake/Wells	76	24.1
Morse/North-South	50	15.9
Jefferson Park	45	14.3



Station 4: Merchandise Mart

Respondents Using Station = 259

Other Station	Number of Respondents	%
Chicago/State	123	47.5
Randolph-Washington/Dearborn	97	37.5
Adams/Wabash	95	36.7
Lake/Wells	83	32.0
Morse/North-South	52	20.1
95th/Dan Ryan	51	19.7
Jefferson Park	45	17.4

Station 5: 95th/Dan Ryan

Respondents Using Station = 207

Other Station	Number of Respondents	%
Adams/Wabash	103	49.8
Chicago/State	87	42.0
Randolph-Washington/Dearborn	58	28.0
Merchandise Mart	51	24.6
Lake/Wells	43	20.8
Jefferson Park	23	11.1
Morse/North-South	23	11.1

Station 6: Jefferson Park

Respondents Using Station = 179

Other Station	Number of Respondents	%
Randolph-Washington/Dearborn	107	59.8
Chicago/State	66	36.9
Lake/Wells	52	29.1
Merchandise Mart	45	25.1
Adams/Wabash	45	25.1
Morse/North-South	28	15.6
95th/Dan Ryan	23	12.8

Station 7: Morse/North-South

Respondents Using Station = 161

Other Station	Number of Respondents	%
Chicago/State	97	60.2
Randolph-Washington/Dearborn	55	34.2
Merchandise Mart	52	32.3
Adams/Wabash	50	31.1
Lake/Wells	31	19.3
Jefferson Park	28	17.4
95th/Dan Ryan	23	14.3





Station 8: Lake/Wells

Respondents Using Station = 194

<u>Other Station</u>	<u>Number of Respondents</u>	<u>%</u>
Randolph-Washington/Dearborn	107	55.2
Chicago/State	91	46.9
Merchandise Mart	83	42.8
Adams/Wabash	76	39.2
Jefferson Park	52	26.8
95th/Dan Ryan	43	22.2
Morse/North-South	31	16.0

Responses will not total 100% due to much reporting of three or more stations.



# Appendix D: Selected Questions by QuikPass Station

QuikPass stations are numbered as in Appendix C, with two categories of non-users added.

The 10 categories are:

- Station 0 = Users of Buses only
- Station 1 = Users of Chicago/State, among other stations
- Station 2 = Users of Randolph-Washington/Dearborn; among other stations
- Station 3 = Users of Adams/Wabash, among other stations
- Station 4 = Users of Merchandise Mart, among other stations
- Station 5 = Users of 95th/Dan Ryan, among other stations
- Station 6 = Users of Jefferson Park, among other stations
- Station 7 = Users of Morse/North-South, among other stations
- Station 8 = Users of Lake/Wells, among other stations
- Station 9 = Users of Rail, but not the eight QuikPass stations (also excludes bus-only users counted in Station 0 above).

Stations 0 through 9 will list the percentage of respondents indicating each possible answer to 12 survey questions in the 12 tables of this Appendix.

Station									
0	1	2	3	4	5	6	7	8	9

**Table 1. Do you like the QuikPass?**

Yes, it is easy to use.	75	46	43	44	48	52	46	42	44	34
Yes, but I would change a few things.	0	1	3	4	1	3	4	1	3	6
Yes, but I would add more stations.	9	52	54	52	51	44	48	56	52	51
Not really, more trouble than it is worth.	2	1	<1	<1	<1	1	2	1	1	5
No, it is not an improvement.	14	<1	<1	<1	0	0	0	0	0	4

**Table 2. How much time does your QuikPass save you each time you use the orange pass-reading turnstile? (0 and 9 = N/A)**

More than 5 minutes	24	23	20	26	28	21	20	24
3 to 5 minutes	29	27	23	27	28	29	14	23
1 to 3 minutes	35	36	40	34	29	36	48	42
Less than 1 minute	10	11	14	12	13	12	16	11
None	2	3	3	1	2	2	2	<1



Station									
0	1	2	3	4	5	6	7	8	9

**Table 3. How often have you used your QuikPass at an orange pass-reading turnstile? (0 and 9 = N/A)**

More than seven times per week.	24	29	30	33	37	42	26	37	
At least once every weekday.	28	27	22	25	23	24	21	28	
Several times per week, but not every day.	31	29	30	30	30	19	38	26	
Seldom.	14	10	14	10	5	11	13	6	
Not at all.	1	2	2	<1	2	2	<1	<1	
I haven't yet, but expect to use it (unspecified) times per week (specified plans were recoded into the groups above).		2	3	2	2	3	2	2	3

**Table 4. Have you ever had to go to an agent's lane because none of the orange pass-reading turnstiles would accept your pass? (0 and 9 = N/A)**

Never, my pass always works.	58	59	63	64	50	60	64	59	
Once	21	18	18	21	20	14	18	16	
Twice	11	12	10	10	17	15	9	12	
Three or more times	10	11	9	5	13	11	9	13	

**Table 5. IF orange QuikPass reading turnstiles were installed at every rail station YOU use, which type of pass would you prefer?**

QuikPass	85	99	99	99	99	97	98	99	99	92
Regular paper Pass	15	1	1	1	1	3	2	1	1	8

**Table 6. Do you regularly ride (check all that apply): Combinations are tabulated.**

CTA Bus and Rail	18	69	65	66	63	64	67	61	64	68
Pace and CTA Bus and CTA Rail	3	11	16	17	14	23	19	14	13	8
CTA Rail only	1	15	14	11	16	3	8	21	16	10
CTA Bus only	74	3	1	2	4	4	1	1	2	11
Pace and CTA Rail	0	1	0	2	<1	2	3	1	2	1
Other combinations	4	1	4	2	3	4	2	2	3	2



Station									
0	1	2	3	4	5	6	7	8	9

**Table 7. How many vehicles (car, van, or other) are available to you and members of your household?**

None	38	38	36	34	34	30	30	52	26	40
One	39	41	36	37	40	38	39	35	42	36
Two	19	14	18	19	16	21	20	8	19	16
Three	3	6	8	7	8	7	9	3	9	5
Four	0	1	1	2	1	3	2	2	2	2
Five	1	<1	1	1	<1	<1	<1	<1	2	0
Six	0	<1	0	0	0	0	0	0	0	1
Seven	0	<1	0	<1	0	0	<1	0	<1	0
More than eight	0	0	0	0	<1	<1	0	0	0	0

**Table 8. What was your combined household income last year, 1986?**

Under \$10,000	6	11	15	13	15	22	14	12	12	10
\$10,000-20,000	26	25	26	24	20	24	17	23	27	26
\$20,000-30,000	27	27	25	26	29	26	24	36	24	25
\$30,000-40,000	19	18	13	15	13	14	17	11	15	15
\$40,000-50,000	10	6	8	9	8	7	11	8	10	11
Over \$50,000	12	13	13	13	15	7	17	10	12	13

**Table 9. How many people live in your household?**

One	43	31	30	30	29	13	23	35	26	30
Two	27	35	31	28	35	26	32	37	38	34
Three	14	17	16	13	15	18	19	14	12	12
Four	10	9	11	12	10	19	14	8	13	11
Five	5	5	8	10	7	14	6	3	8	6
More than five	1	3	4	7	4	10	6	3	3	7

**Table 10. Are you:**

Male	34	50	53	50	58	35	55	61	59	45
Female	66	50	47	50	42	65	45	39	41	55

**Table 11. Are you:**

Hispanic	4	5	7	3	6	2	6	5	6	6
Asian	5	6	7	4	6	1	5	5	5	7
Black	24	24	22	42	28	85	13	20	27	20
White	65	64	61	49	58	9	74	68	61	63
American Indian	1	<1	<1	0	<1	2	<1	0	<1	2
Other	1	1	3	2	2	1	2	2	1	2





Table 12. Is your age:

	Station									
	0	1	2	3	4	5	6	7	8	9
12-17	2	1	1	<1	0	0	0	0	0	0
18-24	11	19	21	21	13	24	16	11	13	13
25-34	28	40	34	36	38	39	32	45	39	37
35-44	24	24	21	21	26	20	24	26	24	25
45-64	32	16	22	21	23	17	26	18	24	25
65 or over	3	<1	1	<1	0	<1	2	0	0	0



## Appendix E. Survey Incentives

QuikPass users received a survey upon purchasing a QuikPass at any of the 29 locations which sold QuikPasses for January 1988. These locations sold only QuikPasses to full-fare monthly pass purchasers, until supplies ran out. Because the quantity of QuikPasses was limited to the 18,000 being tested, and not all purchasers would be likely to use the pass-reading turnstiles, several methods were employed to increase awareness of the QuikPass Survey and encourage a high return rate.

Posters in the 29 sales locations and eight test stations described the features of the QuikPass demonstration project to users and non-users alike. These posters were updated before the second survey to inform users of new sales locations and the current month's first date of sale.

A reward, mentioned on the posters, was offered to those who returned the completed survey on time and who completed an entry blank at the bottom of the survey form. The entry blanks were cut off the survey by CTA machinery and put into a drawing which will award ten free monthly passes in 1989. Separation of the entry blank preserved the confidentiality of the survey's demographic data.





TAER 0448